

Review of the protective effects of rutin on the metabolic function as an important dietary flavonoid

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Abstract

Background

In recent years, flavonoids have been revealed to be helpful in the treatment of many diseases. Rutin (3,3',4',5,7-pentahydroxyflavone-3-rhamnoglucoside) is an important flavonoid that is consumed in the daily diet. It is also known as vitamin P and quercetin-3-*O*-rutinoside. In addition, it is found in many food items, vegetables, and beverages. The cytoprotective effects of rutin, including gastroprotective, hepatoprotective, and anti-diabetic effects, have been shown in several studies. Furthermore, rutin has several pharmacological effects such as anti-inflammatory and anti-glycation activities.

Aim

This work reviewed characteristic, pharmacokinetic, and metabolic effects of rutin in all experimental and human studies.

Conclusions

Based on the above summarized effects of rutin, this flavonoid appears to be a potent component that could be considered in the treatment of several gastrointestinal diseases and diabetes.